

REMARKS/ARGUMENTS

Claims 8-15 are pending.

An objection was raised in the specification concerning a cross reference section.

Claims 8-15 were rejected under 35 U.S.C. Section 103 for allegedly being obvious in view of Dutta et al. (U.S. Pat. No. 6,748,150) and Dugan (U.S. Pat. No. 5,224,183).

Claims 10 and 14 were objected for an informality in the claim language.

As to the specification, a cross reference section has been added to make the priority claim as required by the Examiner. It is noted for the record, however, that a proper priority claim had been made in an ADS that was filed with the application. Section 201.11 part III of the MPEP recognized that a priority claim can be made only in the ADS.

The claims have been amended to more clearly claim the present invention as recited in the claims as originally filed. For example, independent claim 8 has been amended to incorporate the subject matter of claim 9 as originally filed. Claim 9 has been canceled without prejudice. Claim 10 has been amended accordingly. The objection to claim 10 is believed to be overcome.

Independent claim 12 has been amended to incorporate the subject matter of claim 13 as originally filed. The references to the dispersion compensators in amended claim 12 more clearly claim an aspect of the present invention as illustrated by the embodiment shown in Fig. 1 of the instant application. Claim 13 has been canceled without prejudice. Claim 14 has been amended accordingly. The objection to claim 14 is believed to be overcome.

According to the present invention as recited in independent claim 8, dispersion in light signals transmitted over different transmission lines are compensated by different dispersion compensators before being combined by an optical coupler, to compensate for the characteristics of each transmission line. Similarly, according to the present invention as recited in independent claim 12, similar dispersion artifacts are corrected in a light signal before it enters an optical branching filter and in a light signal that is output from the branching filter.

A salient aspect of the present invention is that the proper values of dispersion compensation can be determined based on the dispersion characteristics of the transmission lines along the different optical transmission paths.

Dutta et al., on the other hand, do not provide a dispersion compensator between the optical branching filter (first bandpass filter) 110 and the optical coupler (second bandpass filter) 130 - kindly refer to their Fig. 1. Dutta et al. provide dispersion compensation of the DROP light signal using the dispersion compensator D1 130. Dispersion compensation of the ADD light signal is provided by dispersion compensator D2 170. Dutta et al., however, do not consider dispersion compensation for the light signal that propagates from the optical branching filter 110 directly to the optical coupler 180, namely the THRU signal light.

It is observed that dispersion compensation in Fig. 1 of Dutta et al. can be performed on the THRU light signal 1-4 using the dispersion compensator D1 130 and the dispersion compensator D2 170. However, the dispersion compensator D1 130 and the dispersion compensator D2 170 are used together with the ADD light signal or the DROP light signal. Therefore, it is impossible to determine proper values of dispersion compensation for the individual dispersion effects on the THRU light signal, the ADD light signal and the DROP light signal.

By contrast, the present invention according to claims 8 and 12 each provides a unique dispersion compensator that the THRU light signal can use, and can provide proper dispersion compensation to each light signal. Thus, Dutta et al. do not show proper dispersion compensation for each light signal in the system, and also do not disclose a system construction providing a dispersion compensation for such proper dispersion compensation.

Dugan discloses dispersion compensation for a light signal between Wavelength Division Multiplexer 24 and Wavelength Division Demultiplexer 30 via Dispersion Compensator 26, as can be seen in Fig. 1. Since Dugan does not state a concept of the ADD signal light and the DROP signal, Dugan lacks the motivation needed be combined with Dutta et al. to attain the present invention.

Furthermore, though the optical branching filter recited in claims 8 and 12 is constructed so as to split a single light signal into plural light signals, the Wavelength Division

Multiplexer 24 of Dugan is constructed so as to couple plural light signals to produce a single light signal. Moreover, though the recited optical coupler is constructed so as to couple plural light signals to produce a single light signal, Wavelength Division Demultiplexer 30 of Dugan corresponding to this subject matter is constructed so as to split a single signal light into plural signal lights

Thus, the subject matter of the present invention as recited in the claims differs from Dugan. Where Dugan provides dispersion compensation to all of the light signals together and then separates the light signals after dispersion compensation to produce individual light signals again, the present invention provides proper dispersion compensation for each different light signal in the system; i.e., the present invention provides dispersion compensation to each light signal after splitting, and couples again each light signal into a wavelength-multiplexed light signal before being transmitted from the system. Thus, the present invention according to claims 8 and 12 essentially differs from the technique disclosed by Dugan. Accordingly, there is no motive to reach the present invention by combining the invention of Dugan which discloses only a construction that arranges the Dispersion Compensator 26 between the Wavelength Division Multiplexer 24 and the Wavelength Division Demultiplexer 30 with the invention of Dutta et al.

The present invention is therefore not obvious in view of either or both references to Dutta et al. and to Dugan.

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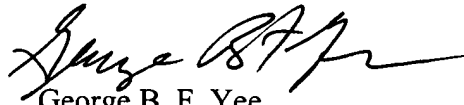
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CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,


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